

U.S. Patent Application Serial No. 10/523,034
Response filed November 15, 2007
Reply to OA dated July 16, 2007

AMENDMENTS TO THE CLAIMS:

Please amend claims 1-4 and 7-9, as follows. This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Currently amended): A flower thinning agent which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,

the inorganic compound being at least one kind selected from ~~silicate mineral~~ silica, calcium carbonate, zeolite, magnesium phosphate, and magnesium carbonate, and

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the flower thinning agent satisfies the following relationships of (a), (b) and (c):

(a) ~~0.03~~ 1.2 $\leq P \leq 30$

(b) $3 \leq Q \leq 800$

(c) $0.5 \leq Q/P \leq 1000$

P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method.

Claim 2 (Currently amended): ~~[[A]] The flower thinning agent of claim 1 which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,~~

wherein the flower thinning agent satisfies the following relationships (d), (e) and (f) :

(d) ~~0.03~~ $1.2 \leq P \leq 10$

(e) $7 \leq Q \leq 300$

(f) $0.5 \leq Q/P \leq 300$

~~P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter~~

~~Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method.~~

Claim 3 (Currently amended) ~~[[A]] The flower thinning agent of claim 1 which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,~~

wherein the flower thinning agent satisfies the following relationships (g), (h) and (i) :

(g) ~~0.03~~ $1.2 \leq P \leq 5$

(h) $10 \leq Q \leq 200$

(i) $1 \leq Q/P \leq 150$

~~P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter~~

~~Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method.~~

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Claim 4 (Currently amended): A flower thinning agent according to any one of claims 1 to 3, ~~which comprises a preparation of a mixture of an inorganic compound of poor water solubility with an additive,~~

wherein the flower thinning agent satisfies the following relationships of (j), (k) and (l):

$$(j) 0.5 \leq D_{ys} \leq 10$$

$$(k) 0.002 \leq D_{xs} \leq 10$$

$$(l) 0.5 \leq D_{ys}/D_{xs} \leq 300$$

Dys: point (ml/g) when mercury penetration increment (Log Differential Intrusion) becomes maximum in a mercury penetration method

Dxs: average pore diameter (μm) of the flower thinning agent as measured by a mercury penetration method

Dys/Dxs: amount of average pore diameter.

Claim 5 (Canceled).

Claim 6 (Previously presented): A flower thinning agent according to any one of claims 1 to 3, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.

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Claim 7 (Currently amended): A flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the flower thinning agent satisfies the following relationships of (a), (e), (m) and (n):

(a) ~~0.03~~ 1.2 $\leq P \leq 30$

(e) $3 \leq Q \leq 300$

(m) $0.01 \leq R \leq 30$

(n) $0.5 \leq S \leq 300$

P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method

R: average particle diameter (μm) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q (m^2/g) measured according to the nitrogen adsorption method/ specific surface area Q1 (m^2/g) calculated from average particle diameter R of particles measured by electron micrograph.

Claim 8 (Currently amended): A flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the flower thinning agent satisfies the following relationships of (a), (e), (o) and (t):

(a) ~~0.03~~ 1.2 $\leq P \leq 30$

(e) $3 \leq Q \leq 300$

(o) $0.01 \leq R \leq 10$

(t) $0.5 \leq S \leq 100$

P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method

R: average particle diameter (μm) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q (m^2/g) measured according to the nitrogen adsorption method/ specific surface area Q1 (m^2/g) calculated from average particle diameter R of particles measured by electron micrograph.

Claim 9 (Currently amended): A flower thinning agent which comprises a mixture comprising calcium phosphate and an additive,

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the additive being at least one kind selected from condensed phosphoric acid and a salt thereof, lecithin, sterol, amino acid, and sucrose fatty acid ester,

wherein the flower thinning agent satisfies the following relationships of (a), (e), (u) and (v):

(a) ~~0.03~~ 1.2 $\leq P \leq 30$

(e) $3 \leq Q \leq 300$

(u) $0.01 \leq R \leq 5$

(v) $0.5 < S \leq 10$

P: average particle diameter (μm) measured by SALD-2000A laser type particle size distribution meter

Q: BET specific surface area (m^2/g) measured according to the nitrogen adsorption method

R: average particle diameter (μm) of particles measured by electron micrograph

S: porosity

S= BET specific surface area Q (m^2/g) measured according to the nitrogen adsorption method/ specific surface area Q1 (m^2/g) calculated from average particle diameter R of particles measured by electron micrograph.

Claim 10 (Canceled).

Claim 11 (Previously Presented): A flower thinning agent according to any one of claims 1-3 and 7-9, wherein an amount of the additive is 0.005 to 200 parts by weight per 100 parts by

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weight of the inorganic compound of poor water solubility.

Claim 12 (Canceled).

Claim 13 (Previously Presented): A flower thinning agent according to claim 4, wherein the inorganic compound of poor water solubility is at least one kind selected from silicate mineral, zeolite, and magnesium phosphate.